

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (*Currently Amended*) A shaping method for use by a shaper (S) in a communication network to convert an incoming data flow (IN) with an incoming data packet rate (R-IN) into an outgoing data flow (OUT) with an adaptive outgoing data packet rate (R-OUT), said shaping method comprising: ~~including the steps of~~

buffering, with a buffer (BUF) of said shaper (S), data packets of said incoming data flow (IN) and generating thereby buffered data packets; and

determining by a first determiner (DET) of said shaper (S) a leaking time moment (P-rel) for a buffered data packet (P) of said buffered data packets, said leaking time moment (P-rel) being a time moment at which said buffered data packet (P) must be leaked by said buffer (BUF) and that determines thereby said adaptive outgoing data packet rate (R-OUT), said step of determining said leaking time moment (P-rel) being realized as a function of traffic contract parameters (PCR; MCR) related to said incoming data flow (IN), ~~characterized in that said method further comprises the steps of:~~

receiving status information (STAT) of a marker (M) which is downstream coupled to said shaper (S);

determining a conform time moment (P-conf) according to said status information (STAT) and according to a predefined drop priority, said conform time moment (P-conf) being a

time moment at which, in the event of leaking said data packet (~~P~~) by said buffer at said conform time moment (~~P-conf~~), said buffered data packet (~~P~~) receives from said marker, upon reception, said predefined drop priority; and

comparing said conform time moment (~~P-conf~~) with said leaking time moment (~~P-rel~~); and in the event when said conform time moment (~~P-conf~~) is earlier than said leaking time moment (~~P-rel~~), giving said leaking time moment (~~P-rel~~) the value of said conform time moment (~~P-conf~~) in order to leak said buffered data packet (~~P~~) at that time moment.

2. (*Currently Amended*) The shaping method according to claim 1, wherein ~~characterized by determining~~ said conform time moment (~~P-conf~~) according to a drop priority assigned to said buffered data packet (~~P~~).

3. (*Currently Amended*) The shaping method according to claim 1, wherein ~~characterized in that~~ in the event that said conform time moment (~~P-conf~~) is later than said leaking time moment (~~P-rel~~), retaining by said comparing means (~~COMP~~) the value of said leaking time moment (~~P-rel~~) in order to leak said buffered data packet (~~P~~) at that time moment.

4. (*Currently Amended*) The shaping method according to claim 1, wherein ~~characterized in that~~ in the event that said conform time moment (~~P-conf~~) is later than said leaking time moment (~~P-rel~~), leaking said buffered data packet (~~P~~) substantially immediately.

5. (*Currently Amended*) The shaping method according to claim 1, wherein characterized in that in the event that said conform time moment (~~P-conf~~) is later than said leaking time moment (~~P-rel~~), said comparing means (~~COMP~~) gives said leaking time moment (~~P-rel~~) the value of a second conform time moment (~~P-conf~~) in order to leak said buffered data packet (~~P~~) at that second time moment, said second conform time moment (~~P-conf~~) being determined according to said status information (~~STAT~~) and according to a second drop priority and being earlier than said leaking time moment (~~P-rel~~).

6. (*Currently Amended*) A shaper (~~S~~) for use in a communication network to convert an incoming data flow (~~IN~~) with an incoming data packet rate (~~R-IN~~) into an outgoing data flow (~~OUT~~) with an adaptive outgoing data packet rate (~~R-OUT~~), said shaper (~~S~~) comprising:

a buffer (~~BUF~~) to buffer data packets of said incoming data flow (~~IN~~) and to generate thereby buffered data packets; and

a first determiner (~~DET1~~) to determine a leaking time moment (~~P-rel~~) for one of said buffered data packets at which said buffered data packet (~~P~~) must be leaked by said buffer (~~BUF~~) and to determine therewith said adaptive outgoing data packet rate (~~R-OUT~~), said first determiner (~~DET1~~) being enabled to determine said leaking time moment (~~P-rel~~) as a function of traffic contract parameters (~~PCR; MCR~~) being related to said incoming data flow₁ (~~IN~~),
characterized in that said shaper (~~S~~) further comprises:

a second determiner (~~DET2~~) receiving status information (~~STAT~~) of a marker (~~M~~) which is downstream coupled to said shaper (~~S~~) and determining a conform time moment (~~P-conf~~)

according to said status information (~~STAT~~) for said buffered data packet (~~P~~), said conform time moment (~~P-conf~~) being a time moment at which, in the event of leaking said buffered data packet (~~P~~) by said buffer at said conform time moment (~~P-conf~~), said buffered data packet (~~P~~) receives upon reception from said marker (~~M~~) a predefined drop priority; and

a comparer (~~COMP~~) coupled between said first determiner (~~DET1~~), said second determiner (~~DET2~~) and said buffer (~~BUF~~) and comparing said conform time moment (~~P-conf~~) with said leaking time moment (~~P-rel~~) and, in the event that said conform time moment (~~P1-conf~~) is earlier than said leaking time moment (~~P-rel~~), giving said leaking time moment the value of said conform time moment (~~P-conf~~) in order to leak said buffered data packet (~~P~~) at that time moment.

7. (*Currently Amended*) A marker (~~M~~) for use in a communication network upstream coupled to a shaper (~~S~~), wherein characterized in that said shaper (~~S~~) is a shaper according to claim 6 and that said marker (~~M~~) comprises a retriever (~~RET~~) retrieving from said marker (~~M~~) status information (~~STAT~~) and transmitting said status information (~~STAT~~) to said shaper (~~S~~).

8. (*Currently Amended*) A telecommunication network, comprising at least a shaper (~~S~~) according to claim 6.

9. (*Currently Amended*) A telecommunication network, comprising at least a marker (~~M~~) according to claim 7.